BRUHATH BANGALORE MAHANAGARA PALIKE
EXECUTIVE ENGINEER
YELAHANKA DIVISION

MODIFIED ESTIMATE

Name of Work: Construction of Drains and providing grills at BB Road in Kempegowda Ward No-01.

Name of Agency: Sri.Y.B Ramesh

Estimate Cost: 70.00Lakhs

Work Order Amount: Rs. 65,45,409.00

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Construction of Drains and providing grills at BB Road in Kempegowda Ward No-01

MODIFIED ESTIMATE

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
1	Earthwork excavation for foundation of buildings, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete as per specifications								
		Cum							
							Total Quantity	0.00	
							Total Schedule-B Quantity	38.90	
							Quantity Upto 125%	0.00	589.11	0.00
2	Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications.								
		Cum							
							Total Quantity	0.00	
							Total Schedule-B Quantity	7.79	
							Quantity Upto 125%	0.00	6152.06	0.00
							Quantity Above 125%	0.00	5606.72	0.00
	Rate Analysis								
	Basic Rate	5194.00							
	Area Weightage @8%	415.52							
	Sub Total Amount	5609.52							
	Add TP 0.05% Below	-2.80							
	Total Amount	5606.72							
3	Providing and laying in position reinforced cement concrete of design Mix M25 with OPC @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregtes @ 0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintels and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, lintles, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications.								
		Cum							

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
						Total Quantity	0.00		
						Total Schedule-B Quantity	28.20		
						Quantity Upto 125%	0.00	7265.39	0.00
4	Providing T.M.T steel reinforcement for R.C.C work TMT bars Fe500 including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications.								
		Tonne							
						Total Quantity	0.00		
						Total Schedule-B Quantity	2.82		
						Quantity Upto 125%	0.00	88249.32	0.00
5	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specifications.								
		Sqm							
						Total Quantity	0.00		
						Total Schedule-B Quantity	148.80		
						Quantity Upto 125%	0.00	330.34	0.00
6	Fabricating, providing and erecting in positiort of MS Hot Dip Galvanised Sq. Hallow Poles of 132 X 132 Heavy gauge of length 3000mm with MS. Hot dip Galvanised grill work as per approved design and drawing of chief architect. Using 12 X 75mm galvanised flat or alriound frame and 20 X 20mm galvanised forged design with square for vertical at 150mm c/c as shown in the drawing including providing forged ornamental arrow head at top and bottom. The work is inclusive of throughing flat, square rods, placing welding all the joints, including grinding, finishing 2 coats of anticorrosive paint over one coat of metal primer. The rate is inclusive of all materials like MS. Hollow galvanized pipe, flats, forged square rods, cost of labour for all items of work cost painting, welding, cutting, grinding with all lead and lift as per specification including loading and unloading with cost and conveyance of all materials, labour, machinery andincidental charges for the successful completion of the work as per the direction of the Engineer-in- charge of the work. (Data Rate)								
		Sqm							
	High School Premisess								
			1	30.00		2.10	63.00		
			1	30.00		2.10	63.00		
			1	26.00		2.10	54.60		
	Towards Main Road Bescom Office		1	30.00		2.10	63.00		
						Total Quantity	243.60		
						Total Schedule-B Quantity	260.40		
						Quantity Upto 125%	243.60	9578.49	2333320.16

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
7	Providing and fixing stainless steel 304 grade for staircase railings, balconies, ramps, with hand rail, 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of and electrical charges, etc., complete as per specifications.								
		Sqm							
	BB Road (At Railway underpass) from Prakesh Theater to RMZ								
	LHS		1	30.00		1.50	45.00		
			1	30.00		1.50	45.00		
			1	30.00		1.50	45.00		
			1	30.00		1.50	45.00		
			1	30.00		1.50	45.00		
			1	30.00		1.50	45.00		
			1	4.40		1.50	6.60		
	LHS		1	30.00		1.50	45.00		
			1	12.00		1.50	18.00		
						Total Quantity	339.60		
						Total Schedule-B Quantity	276.00		
						Quantity Upto 125%	339.60	6811.56	2313205.78
8	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3								
		Cum							
	From B B Main Road to Dead end								
			1	30.00	6.15	0.15	27.68		
			1	30.00	6.80	0.15	30.60		
			1	30.00	6.30	0.15	28.35		
			1	11.30	4.85	0.15	8.22		
			1	30.60	4.30	0.15	19.74		
	At BESCOM Office in Yelahanka Police Station Circle								
			1	16.00	4.85	0.20	15.52		
	Desilting of Drain								
	At BESCOM Office in Yelahanka Police Station Circle								
			1	15.00	0.60	0.50	4.50		
						Total Quantity	134.60		
						Total Schedule-B Quantity	101.40		
						Quantity Upto 125%	126.75	225.51	28583.39
						Quantity Above 125%	7.85	225.51	1770.84

Rate Analysis	
Basic Rate	130.00
Loading & Unloading	57.00
Lead 8km (8x1.28x2)	20.48
Area Weightage @6%	7.80
Total Amount	215.28
Add TP 4.75% Above	10.23
Total Amount	225.51

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
9	Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3								
		Sqm							
	From B B Main Road to Dead end								
			1	30.00	6.15		184.50		
			1	30.00	6.80		204.00		
			1	30.00	6.30		189.00		
			1	11.30	4.85		54.81		
			1	30.60	4.30		131.58		
	At BESCOM Office in Yelahanka Police Station Circle								
			1	16.00	4.85		77.60		
						Total Quantity	841.49		
						Total Schedule-B Quantity	676.00		
						Quantity Upto 125%	841.49	6.66	5604.29
10	Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305								
		Cum							
	From B B Main Road to Dead end								
			1	30.00	6.15	0.45	83.03		
			1	30.00	6.80	0.45	91.80		
			1	30.00	6.30	0.40	75.60		
			1	11.30	4.85	0.45	24.66		
			1	30.60	4.30	0.45	59.21		
						Total Quantity	334.30		
						Total Schedule-B Quantity	338.00		
						Quantity Upto 125%	334.30	360.86	120634.87
11	Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.								
		Cum							
	From B B Main Road to Dead end								
			1	30.00	6.15	0.10	18.45		
			1	30.00	6.80	0.10	20.40		
			1	30.00	6.30	0.10	18.90		
			1	11.30	4.85	0.10	5.48		
			1	30.60	4.30	0.10	13.16		
	At BESCOM Office in Yelahanka Police Station Circle								
			1	16.00	4.85	0.10	7.76		
						Total Quantity	84.15		
						Total Schedule-B Quantity	67.60		
						Quantity Upto 125%	84.15	2096.34	176403.87

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
12	Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. MORTH Specification No. 2100								
		Cum							
	From B B Main Road to Dead end								
			1	30.00	6.15	0.15	27.68		
			1	30.00	6.80	0.15	30.60		
			1	30.00	6.30	0.15	28.35		
			1	11.30	4.85	0.15	8.22		
			1	30.60	4.30	0.15	19.74		
	At BESCOM Office in Yelahanka Police Station Circle								
			1	16.00	4.85	0.15	11.64		
						Total Quantity	126.22		
						Total Schedule-B Quantity	101.40		
						Quantity Upto 125%	126.22	5950.42	751078.38
13	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum.								
		Cum							
	From B B Main Road to Dead end								
			1	30.00	6.15	0.15	27.68		
			1	30.00	6.80	0.15	30.60		
			1	30.00	6.30	0.15	28.35		
			1	11.30	4.85	0.15	8.22		
			1	30.60	4.30	0.15	19.74		
	At BESCOM Office in Yelahanka Police Station Circle								
			1	16.00	4.85	0.175	13.58		
						Total Quantity	128.16		
						Total Schedule-B Quantity	101.40		
						Quantity Upto 125%	126.75	5901.90	748065.83
						Quantity Above 125%	1.41	5901.90	8337.91

Rate Analysis	
Basic Rate	5315.35
Area Weightage @6%	318.92
Total Amount	5634.27

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Add TP 4.75% Above	267.63							
	Total Amount	5901.90							
14	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications, Clause 507 of MORTH V revision as per IRC SP-53-2015. – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)								
		Cum							
							Total Quantity	0.00	
							Total Schedule-B Quantity	11.68	
							Quantity Upto 125%	0.00	8950.53	0.00
	EIRL ITEMS								
E-1	Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate								
		Sqm							
	For Drain								
	At BESCOM Office in Yelahanka Police Station Circle								
			1	15.00	0.90		13.50		
							Quantity Upto 125%	13.50	2448.01	33048.10
	Rate Analysis								
	Basic Rate	2337.00							
	Add TP 4.75% Above	111.01							
	Total Amount	2448.01							
E-2	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete.(KPWD SR 2018-19, Page No.27, Item No.5.30)								
		Nos							
	At BESCOM Office in Yelahanka Police Station Circle								
			1	15.00		"/0.45	33.00		
							Quantity Upto 125%	33.00	453.02	14949.75
	Rate Analysis								
	Basic Rate	408.00							
	Area Weightage @6%	24.48							
	Total Amount	432.48							
	Add TP 4.75% Above	20.54							
	Total Amount	453.02							

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
E-3	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (KPWD SR 2018-19, Page No.180, Item No.24.1)								
		Nos							
	At BESCOM Office in Yelahanka Police Station Circle								
			1	15.00		0.35	5.25		
	Rate Analysis						Quantity Upto 125%	5.25	88.83	466.35
	Basic Rate	80.00							
	Area Weightage @6%	4.80							
	Total Amount	84.80							
	Add TP 4.75% Above	4.03							
	Total Amount	88.83							
							Total Construction Cost		6535470.00
							Add GST Charges 12%		784256.00
							Grand Total		7319726.00

CERTIFICATE:

1. The work spot has been inspected by me and the work is found to be necessary.
2. The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2018-19
3. The Provisions made in the estimate are quite necessary and adequate.
4. The area comes with in the BBMP limits.

Asst. Engineer
Ward No.01
BBMP, Bnagalore

Asst. Executive Engineer
Yelahanka Sub Division
BBMP, Bnagalore

Executive Engineer
Yelahanka Division
BBMP, Bnagalore

Technical Sanction
Accorded For 7319726.00
Head of A/C. 13853
CER NO : 90 Dt: 26.04.2022